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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,589	04/19/2000	Masato Ochiai	35.C14438	4086

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EXAMINER

HAMILTON, MONPLAISIR G

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,589

Applicant(s)

OCHIAI ET AL.

Examiner

Monplaisir G Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/25/2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 10-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-36 were amended by the amendment filed on 9/25/2002. Claims 1-5 and 10-57 remain for examination.

Drawings

2. The drawings are objected to because Fig. 16 does not include "Yes/No" Labels for the decision symbols. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Response to Arguments

3. Applicant's arguments with respect to Claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-5 and 10-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6348,971 issued to Owa et al, herein referred to as Owa in view of US Patent 5129639 issued to DeHority.

Referring to Claim 1, 10, 28, 44, 55 and 56:

Owa discloses a device search system comprising a server unit and a client unit, wherein said server unit (Fig 1; col 3, lines 15-24) comprises: database control means for controlling a database in which information for identifying a device on a network and information of various attributes of the device are registered and for executing a search for a device in accordance with a search request from said client unit (col 3, lines 50-55), and wherein said client unit comprises: first generation means for generating a first condition designating one or more attributes in order to search for a desired device on the network (col 4, lines 18-20); recognition means for recognizing whether obtained search result information shows a presence or an absence of each attribute designated by the first condition generated by the first generation means (col 5, lines 40-45); second generation means for extracting a certain attribute from the first condition to generate a second condition (col 6, lines 10-25); search means for requesting said server unit to search the database for information of a device satisfying the second condition generated by the second generation means (col 6, lines 10-25).

Owa does not explicitly disclose the claimed “search means for requesting said server unit to search the database for information of a device satisfying the second condition generated by the second generation means in recognition by the recognition means that the search result information shows the absence of each attribute designated by the first condition; and output means for outputting a search result under the first condition when the recognition means recognizes that the search result information shows the presence of each attribute designated by the first condition, and for outputting a search result under the second condition when the recognition means recognizes that the search result information shows the absence of each attribute designated by the first condition.”

DeHority discloses the user can specify that the print job should continue with the best match between the print requirements and the printer capabilities (col 1, lines 65-67; col 2, lines 1-10). DeHority disclose an automated matching procedure that is essentially the same at the search conducted by Masato (09/552589) when it is recognized that there is an “absence of each attribute designated in the first condition.”

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art modify Owa such that best match for a printer search condition is returned. One of ordinary skill in the art would have been motivated to do this because it would allow the print job to continue if an exact match for the requirements is not available.

Referring to Claim 15, 24, 33, 50 and 57:

Owa discloses a apparatus for searching a database in accordance with a query received from a client unit, said apparatus comprising: execution means for executing a search in

accordance with a search request from the client unit (col 5, lines 31-35); database control means for controlling a database in which information for identifying a device on a network and information for various attributes of the device are registered, and for controlling execution of the search for the device in accordance with the search request from the client unit (col 5, lines 30-35); a reception means for receiving from the client unit a first condition designating one or more attributes in order to search for a desired device on the network (col 5, lines 30-31); recognition means for recognizing whether obtained search result information shows a presence or an absence of each attribute designated by the first condition received by said reception means (col 5, lines 40-45); generation means for extracting a certain attribute from the first condition to generate a second condition (col 6, lines 10-25).

Owa does not explicitly disclose the claimed “first search means for searching for a device satisfying the second condition from the database in response to a recognition by said recognition means that the search result information shows the absence of each attribute designated by the first condition; and output means for outputting a search result under the first condition when said recognition means recognizes that the search result information shows the presence of each attribute designated by the first condition, and for outputting a search result under the second condition when said recognition means recognizes that the search result information shows the absence of each attribute designated by the first condition”.

DeHority discloses the user can specify that the print job should continue with the best match between the print requirements and the printer capabilities (col 1, lines 65-67; col 2, lines 1-10). DeHority disclose an automated matching procedure that is essentially the same at the

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search conducted by Masato (09/552589) when it is recognized that there is an “absence of each attribute designated in the first condition.”

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art modify Owa such that best match for a printer search condition is returned. One of ordinary skill in the art would have been motivated to do this because it would allow the print job to continue if an exact match for the requirements is not available.

Referring to Claim 19:

Owa discloses a method for searching a database in which information for identifying a device on a network and information of various attributes of the device are registered, in accordance with a query sent to a server unit, said method comprising: a generation step of generating a first condition designating one or more attributes in order to search for a desired device on the network (col 5, lines 31-35); a recognition step of recognizing whether obtained search result information shows a presence or an absence of each attribute designated by the first condition generated in said generation step (col 5, lines 40-45); extraction step of extracting a certain attribute from the first condition to generate a second condition ((col 6, lines 10-25));

Owa does not explicitly disclose the claimed “a request step of requesting the server unit to search the database for information of a device satisfying the second condition generated in said extraction step in response to a recognition in said recognition step that the search result information shows the absence of each attribute designated by the first condition; and an output step of outputting a search result under the first condition when said recognition step recognizes that the search result information shows the presence of each attribute designated by the first

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condition, and outputting a search result under the second condition when said recognition step recognizes that the search result information shows the absence of each attribute designated by the first condition.

DeHority discloses the user can specify that the print job should continue with the best match between the print requirements and the printer capabilities (col 1, lines 65-67; col 2, lines 1-10). DeHority disclose an automated matching procedure that is essentially the same at the search conducted by Masato (09/552589) when it is recognized that there is an "absence of each attribute designated in the first condition."

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art modify Owa such that best match for a printer search condition is returned. One of ordinary skill in the art would have been motivated to do this because it would allow the print job to continue if an exact match for the requirements is not available.

Referring to Claim 2, 11, 16, 20, 25, 29, 34, 45 and 51:

Owa in view of DeHority disclose the limitations as discussed in Claims 1 10, 15, 19, 24, 28, 33, 44, 50 above. Owa further discloses a device attribute controlled by the database includes an indispensable attribute to be registered whenever a device is registered in the database and attributes other than the indispensable attribute (col 5, lines 5-10, lines 49-53), and the second generation means extracts only the indispensable attribute from attributes designated by the first condition to generate the second condition (col 6, lines 6-15).

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Referring to Claims 3, 12, 17, 21, 26, 30, 35, 46 and 52:

Owa in view of DeHority disclose the limitations as discussed in Claims 2, 11, 16, 20, 25, 29, 34, 45 and 51 above. DeHority further discloses selectively outputting the search result information under the first condition or the search result information under the second condition in accordance with a predetermined condition (Fig. 2B; col 4, lines 32-40).

Referring to Claims 4, 13, 18, 22, 27, 31, 36, 47, 53:

Owa in view of DeHority disclose the limitations as discussed in Claims 3, 12, 17, 21, 26, 30, 35, 46 and 52 above. DeHority further discloses outputting the search result information under the first condition when a device to be outputted as the search result information under the first conditions is present, and outputs the second result information when a device to be outputted as the search result information under the first condition is not present (Fig. 2B; col 4, lines 32-40).

Referring to Claims 5, 14, 23, 32, 48:

Owa in view of DeHority disclose the limitations as discussed in Claim 2, 11, 20, 29, and 45 above. DeHority further discloses the client is notified of the mismatch (col 4, lines 20-25).

Owa and DeHority do not explicitly state a “storage means for storing symbol information corresponding to an attribute that can be designated by the first condition, and when the search result information under the second condition is outputted and when the information showing a presence or an absence of each attribute designated by the first condition is outputted,

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a presence or an absence of each attribute is shown in accordance with a display mode of the symbol information corresponding to each attribute.”

However the notifications as disclosed by DeHority can take many forms including the claimed symbol state change to represent a mismatch (presence/absence). It would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify the teachings of Owa and DeHority to provide a symbol for each attribute that represents a mismatch (presence/absence).

Referring to Claims 37-43, 49 and 54:

Owa in view of DeHority disclose the limitations as discussed in Claims 1, 10, 15, 19, 24, 28, 33, 44 and 50 above. Owa further discloses the second condition is determined based on at least one of a color printing attribute, a finishing attribute, and a print layout attribute, and the output means displays on a display unit at least one printer identifier that corresponds to a printer satisfying the second condition (col 5, lines 1-5).

Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6335795 issued to Neuhard, Deborah Elizabeth et al. Neuhard disclose a method, apparatus, and article of manufacture for selecting one of a plurality of printers attached to a server with a user interface installed on a computer networked to the server. The computer

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would first query a cache or the server for a first set of print options supported by at least one of the printers. The user interface is then updated to include the first set of print options. After the user interface program is used to select a print option from the first set, the computer then determines a second set of print options available with the previously selected print option. Each print option in the second set is supported by at least one of the printers that also supports the print option selected from the first set. The user interface program is then updated to include the second set of print options.

US 6182083 issued to Scheifler, Robert W. et al. Scheifler discloses a database system wherein one or more entry databases store a plurality of entries. Each entry is of a given type that defines the fields of the entry. Each field contains or identifies an object with associated attributes or data. The type of each entry may further define behavior in the form of methods the entry can implement. An entry type, which is a subtype of another, inherits all fields and behavior of its super-type, and contains additional fields and/or defines new/modified behavior. Entries may be expressed in a Java™ programming language. The database system may further employ a search engine, which allows queries to be made upon entries in the database.

US 5625757 issued to Kageyama, Seiji et al. Kageyama discloses a printing system including a plurality of terminal equipment, a plurality of printers which can be shared by the terminal equipment, one or more printer/spooler control servers each for receiving a print from the terminal equipment and for controlling the print by the printer, and a distributed printing management server, for various errors which occur in the printers, the contents of the errors are

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informed to the user and an error recovery process according to the error is realized. Thus, a use efficiency, performance, reliability, and serviceability as a printing system are improved.

US 4727487 issued to Masui, Shoichi et al. Masui discloses a resource allocating method, which allows effective utilization of resources in the system in accordance with experience of operation without assistance of a system operator when parameters for determining the allocation of the resources are to be modified.

JP-07302267 issued to Nippon Telegraph and Telephone. Nippon discloses an apparatus has an alternative reference condition acquisition device that forms several kinds of alternative reference conditions on a database when data, which satisfies a reference condition, is not present in the database.

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Final Rejection

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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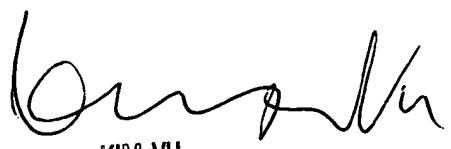
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is 1703-305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on 1703-305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are 1703-746-7239 for regular communications and 1703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1703-305-3900.

Monplaisir Hamilton
October 24, 2002


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100